

CLAIMS

What is claimed is

1. A method of limiting server use by a client, said method comprising the steps of:
 - a) Said client transmitting a request for a file or action (script) from said server, said request accompanied by valid client state information.
 - b) Said server examining said client state information and redirecting client to a new file or action (script) accompanied by new client state information.
 - c) Said client transmitting a new request for said new file or action (script), accompanied by one of i) the said new client state information, ii) the original client state information or iii) no client state information.
 - d) Said server verifying that said client state information accompanying said new request is the said new client state information and verifying that said client state information accompanying said new request is within acceptable limits to proceed with said new request.
 - e) If said verification completely successful, said server fulfilling either i) said client request or ii) said client new request.
2. A method of limiting server use by a client, said method comprising the steps of:
 - a) Said client transmitting a request for a file or action (script) from said server, said request not accompanied by valid client state information.
 - b) Said server determining that said request is not accompanied by said valid client state information and redirecting client to a new file or action (script) accompanied by valid client state information after a human-significant (> 1 second) delay.
 - c) Said client transmitting a new request for said new file or action (script), accompanied by one of i) the said new client state information, ii) the original client state information or iii) no client state information.
 - d) Said server verifying that said client state information accompanying said new request is the said new client state information and verifying that said client state information accompanying said new request is within acceptable limits to proceed with said new request.
 - e) If said verification completely successful, said server fulfilling either i) said client request or ii) said client new request.

3. A method of limiting server use by a client, said method comprising the steps of:
 - a) Said client transmitting a request for a file or action (script) from said server, said request not accompanied by valid client state information.
 - b) Said server determining that said request is not accompanied by said valid client state information and redirecting client to a form accompanied by valid client state information, said form containing information about said client's said request.
 - c) A user of said client completing said form and submitting to said server, accompanied by one of i) the said new client state information, ii) the original client state information or iii) no client state information.
 - d) Said server verifying that said client state information accompanying said submitted form is the said new client state information and verifying that said client state information accompanying said new submitted form is within acceptable limits to proceed with said request.
 - e) If said verification completely successful, said server fulfilling either i) said client request or ii) said client new request.
4. The method of Claim 1,2 or 3, comprising the additional step of:
 - a) If said verification not completely successful, said server optionally returning at least one of i) an error file or ii) a redirection to an error message file or action (script).
5. The method of Claim 4 comprising the additional step of:
 - a) Said server returning said error file or said redirection accompanied by further modified client state information, said further modified client state information reflecting a "credit" for that portion of the requested operation not completed.
6. The methods of Claim 1,2, 3, 4 or 5 where additionally all client state information is i) encoded before transmission to said client by means obscure to said client or ii) encrypted using a key not known to nor discoverable by said client, or iii) both i) and ii).
7. A method of limiting server use by a client, said method comprising the steps of:
 - a) Said client transmitting a request for a file or script from said server.
 - b) Said server requesting state information from said client.
 - c) Said client transmitting said state information.

- d) Said server modifying said state information and transmitting said modified state information to said client.
 - e) Said client optionally replacing original state information with said modified state information.
 - f) Said server requesting state information from said client.
 - g) Said client transmitting either said modified state information or some other state information.
 - h) Said server verifying that said client state information is the modified client state information and verifying that said modified client state information is within acceptable limits to proceed with said request. If not, skip to step j)
 - i) Said server fulfills said client request (method completion 1)
 - j) Said server returns an error message or redirects said client to request an error message file (method completion 2)
8. A network of computer systems comprising:
- a) a client system having a client processor and a client computer readable medium coupled to said client processor, said client computer readable medium containing program instructions for receiving a state object which specifies state information and for storing said state object on said client computer readable medium;
 - b) a server system having a server processor and a server computer readable medium coupled to said server processor, said server system coupled to said client system through a network medium, said server computer readable medium containing program instructions i) for transmitting a file from said server system to said client system and/or executing a process at client request, ii) for transmitting said state object to said client system, iii) for updating server usage information in said state object and verifying the update has been accepted by client before client's request to transmit certain files or execute certain processes is fulfilled.
9. The methods of Claims 1, 2, 3, 4, 5, 6 or 7, where said new client state information additionally contains a timestamp, said timestamp being used by said server to determine if said new client information has been recently updated and said server rejecting as invalid any said new client information that is deemed too old and declining to fulfill said client request or said new client request.
10. A computer readable medium, containing executable program instructions for performing a method comprising the methods of 1, 2, 3, 4, 5, 6, 7 or 9.